

Montana DEQ Forest Fire Smoke Advisory

August 12 2007

10:00 AM Sunday

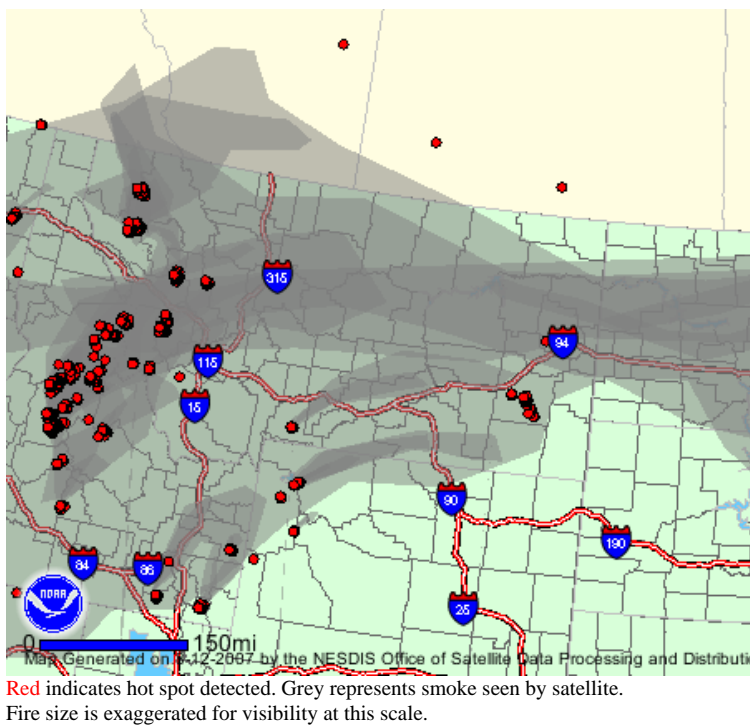
Current Situation

Smoke is covering the sky over a wide swath of Montana this morning. Most of the residual smoke is aloft right now but will be mixing down to the surface later this morning. Smoke is trapped under strong inversions in most of the valleys west of the divide. It is clear at the surface with the smoke right overhead in some locations but [UHNEALTHY](#) levels have reached the surface in Kalispell and Whitefish. [UNHEALTHY FOR SENSITIVE](#) conditions are currently impacting Polson, Ronan, Missoula and Hamilton. [MODERATE](#) smoke is currently reported in Butte and Dillon. With Red Flag warning for dry and windy conditions this afternoon, direct smoke impacts downwind of active fires could be severe today. See the forecast below for details. Residents near active fires or experiencing noticeable smoke levels should use the [VISIBILITY GUIDELINES](#) to determine smoke levels in their area and guide their activity decisions.

Morning satellite photo centered on Great Falls:



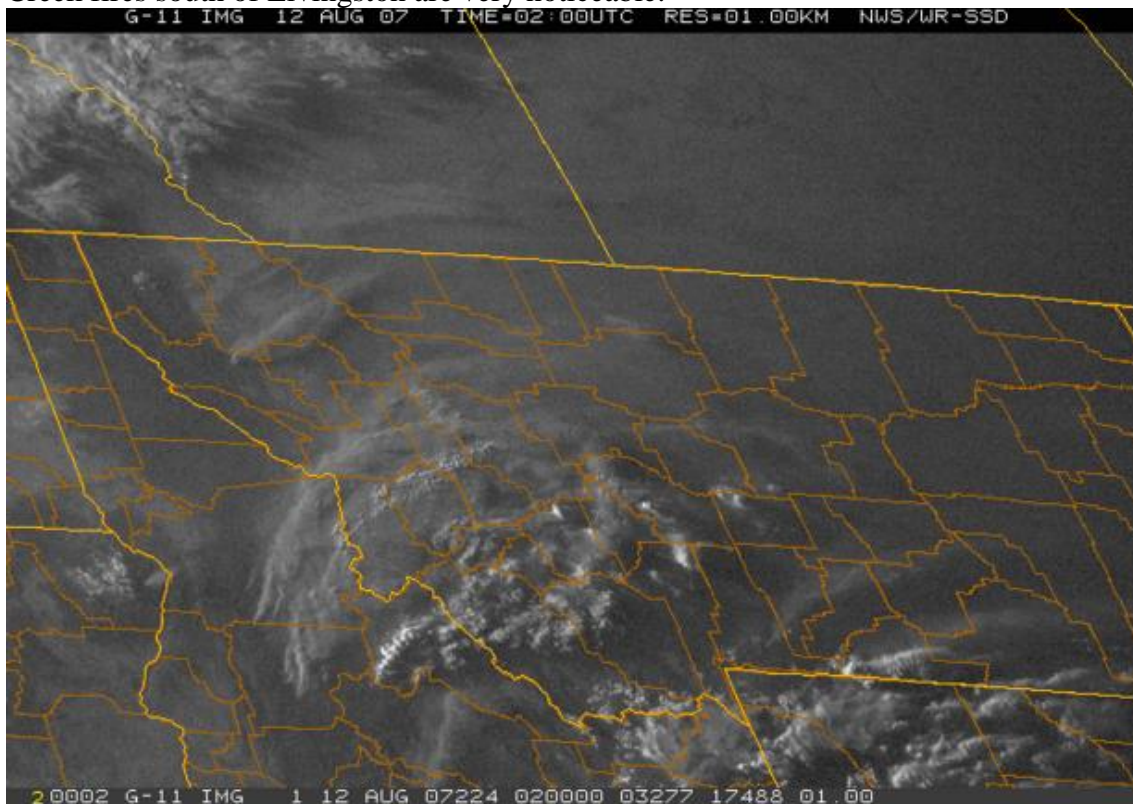
This morning's analysis from NOAA's satellite services division shows the active fires in Montana and the smoke plumes combining and spreading downwind(the analyzed smoke is based on yesterday's satellite coverage, the fire detects are based on last nights satellite coverage)



To identify individual fires on graphic above go here:

http://activefiremaps.fs.fed.us/lg_fire2.php

This satellite photo from 7:30 PM last night shows the plumes coming off of the fires in Idaho and Montana. Plumes from the Chippy Creek fire west of Polson and the Wicked Creek fires south of Livingston are very noticeable.



Real time particulate information is currently available in most of the larger urban areas from several different sources including: DEQ run PM-10 BAMS and PM2.5 BAMS, CS&KT run PM-10 TEOMS, NWS ASOS visibility monitors, and USFS remote access Nephelometers and BAMS.

This morning's smoke report is below, comparing particulate levels where we have information to MDEQ's Forest Fire health advisory levels.

Updated 10 AM August 12, 2007

Locations and severity of forest fire smoke reports since midnight of the date above at reporting stations.

HAZARDOUS	
VERY UNHEALTHY	
UNHEALTHY	Kalispell Vis(2) Whitefish Vis(2)
UNHEALTHY FOR SENSITIVE GROUPS	Polson T24 Ronan T24 Missoula T8 Hamilton 24
MODERATE	Butte T8 Dillon Vis(1)

T1(x)	One-hour TEOM or BAM value (number of values)
T8(x)	Eight-hour average TEOM or BAM value(number of values)
T24	24 hour average TEOM or BAM value
Vis(x)	Visibility value(number of hours)
Vis(am/pm)	Visibility value from twice/day reporting stations
(est)	estimate

Local impacts in areas immediately adjacent to active fires are expected to exceed some or all of the advisory levels. DEQ recommends the use of local [visibility guidelines](#) to evaluate possible health risks and make informed activity decisions.

Forecast

Red Flag warnings for high winds, low humidity and a pronounced wind shift have been posted beginning at noon today. These conditions are likely to produce large plumes from the fires in the area today. Overall smoke transport under the high pressure ridge will be marginal and the smoke levels will be building over the state for the next several days. Smoke aloft will mix down sharply in the western valleys and over central Montana under the thickest parts of the plume aloft. Smoke will return to Helena, Butte and Great Falls today and will likely start impacting communities farther east by tomorrow. Smoke from the Wicked Creek fire may start to be a problem in the upper and middle Yellowstone drainage. Smoke impacts along the northern Front Range will also likely increase. Most western Montana valleys will be experiencing high levels of smoke for the next several days. Direct plume impacts northeast and east of the active fires will be a problem today for communities near active fires. Those communities downwind of these fires will need to pay close attention to conditions in their area and use the [visibility guidelines](#) to guide their activity decisions as the situation changes.

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